OPTICALLY ADDRESSABLE HIGH DENSITY CIRCUIT BOARD PROBE APPARATUS AND METHOD FOR UTILIZING IT

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Abstract

PURPOSE: To obtain a probe apparatus applicable to any circuit with improved reliability even if a probe density exceeds a highly specific value by providing a probe panel having photoelectrically addressable electrodes of high density and means for operating respective photoelectric switches.
CONSTITUTION: The design of a circuit board 16 based on CAD (computer aided design) data 18 is loaded in a computer 20. The computer 20 operates a laser pulse sequencer 22 and a matrix address designation controller 24 by utilizing the design data from the data 18. Further, upper and lower probe matrixes 12, 14 are driven by utilizing both, and the board 16 is tested. The matrixes 12, 14 receive the test data obtained by the executed test by the board 16, and send it to a measuring controller 26. The controller 26 further senses the test result to the computer 20 for net test sequence. Respective contact electrodes can provide electrode density of 10000 electrodes/square inch to largely exceed the density of about 200 probes/square inch.